



CAIT

Center for Advanced Infrastructure & Transportation
Rutgers, The State University of New Jersey

QUARTERLY PROGRESS REPORT

Project Title:	Development of Airport Obstruction Identification System		
RFP NUMBER:		NJDOT RESEARCH PROJECT MANAGER: Ed Kondrath	
TASK ORDER NUMBER/Study Number: 115 / 4-26857		PRINCIPAL INVESTIGATOR: Patrick Szary	
Study Start Date: 01/1/2002 Study End Date: 12/31/2003		Period Covered: 2 nd Quarter 2003	

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
1. Literature Search	10%	0%	100%	10%
2. Develop criteria	5%	0%	100%	5%
3. Evaluate the cost effectiveness	8%	15%	90%	7.2%
4. Conduct laboratory experiments	5%	10%	60%	3%
5. Conduct laboratory/field experiments	15%	5%	70%	10.5%
6. Develop prototype software	25%	30%	70%	17.5%
7. Demonstrate field test system	5%	0%	0%	0%
8. Redesign a new prototype	5%	30%	60%	3%
9. Demonstrate prototype system	5%	0%	0%	0%
10. Train NJDOT personnel	7%	0%	0%	0%
11. Final Report	10%	10%	0%	1%
TOTAL	100%			57.2%

1. Progress this quarter by task:

- A. The go ahead was given for the purchase of the home built system. This was the helicopter from Bergen RC in Michigan along with the various other components for each task.
- B. A GPS unit for the system was decided upon. The unit, SF2050 from Navcom GPS, provides all of the components that had been sought out for the system. It is a highly accurate unit, relatively small, and is reasonably priced. The unit will be sufficient for use with this project.
- C. Progress on this project to date has been documented in a preliminary report which will be the basis for the final project report submitted upon completion. This report will be e-mailed to NJDOT as a reference of all work completed to date.
- D. Upon evaluation of all the final selected components there was a weight concern. The home built system will not exceed the net working weight of the Bergen system but will come close. Thus we are cautious about the overall performance of the system. This required further investigation that we are actively pursuing.

2. Proposed activities for next quarter by task

- A. Buying the custom made RC helicopter along with a smaller RC helicopter for practice.
- B. Custom made helicopter field demonstration and building or modifying our prototype software based on our new data collector hardware.

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3. List of deliverables provided in this quarter by task (product date)

A. List of requirements for a custom made RC helicopter.

4. Progress on Implementation and Training Activities

A. Buying a RC helicopter for training. The consultant we will be working with will provide the training package for flying the RC equipment.

5. Problems/Proposed Solutions

A. Ability of the NJDOT personnel to learn to fly an RC helicopter because it is considered a difficult task. Thus it is critical to begin training as soon as the GPS selection is made to allow enough training time prior to the development and delivery of the final system.

6. Budget Summary*

Total Project Budget(# of years)	2 Years	\$210,000.00
Total Project Expenditure to date		\$76,481
% of Total Project Budget Expended		36%
Task Order Number/Study Number:		115 / 4-26857
Current Task Order Budget (# of years)	Year 1 and 2	\$210,000.00
Actual Expenditure to date against current task order		\$76,481
% of current task order budget expended		36%

* These are approximate expended amounts for the project; these estimates are for reference only and should not be used for official accounting purposes. For a more accurate project accounting please review the quarterly invoice for this project.

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